

Claims

What is claimed is:

1. A distributed database system, comprising:
a plurality of distributed worker systems, the worker systems acting as data servers;
5 at least one coordinator system configured to communicate with the plurality of worker
systems through a network; and
a database administered by a first entity utilizing the coordinator system and the plurality
of worker systems, wherein at least a portion of the plurality of worker systems
are owned and operated by at least one second entity that is different from the first
10 entity.
2. The distributed database system of claim 1, wherein the plurality of worker systems
comprise over a thousand systems.
- 15 3. The distributed database system of claim 1, wherein the coordinator system maintains
information about the current performance and availability of each of the worker systems.
4. The distributed database system of claim 1, wherein operators of each worker computer
can control parameters of data server usage for the worker computer.
- 20 5. The distributed database system of claim 4, wherein the controlling parameters comprise
an amount of network bandwidth utilized, disk space usage, or hours of usage.
6. The distributed database system of claim 1, wherein data and indexing information for the
25 database is organized in a multi-level hierarchy.
7. The distributed database system of claim 6, wherein distribution of data, index
information, and user requests are dynamically modified in response to an actual load to optimize
performance of the database system.

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8. A distributed database system, comprising:
at least one thousand distributed worker systems, the worker systems acting as data
servers;
at least one coordinator system configured to communicate with the worker systems
through a network; and
a database administered by utilizing the at least one coordinator system and the plurality
of worker systems.

9. The distributed database system of claim 8, wherein the database is administered by an
entity and the worker systems are owned and operated by the same entity.

10. The distributed database system of claim 8, wherein the network comprises the Internet.

11. A distributed processing system providing database operations, comprising:
a plurality of client systems running a client agent program, the client agent program
comprising a database module;
at least one server system configured to communicate with the plurality of client systems
through a network to coordinate database workloads processed by the database
modules; and
a capabilities database coupled to the server system, the capabilities database comprising
data concerning processing capabilities for the client systems;
wherein the server system utilizes the capabilities database to schedule database
workloads for the database modules.

12. The distributed processing system of claim 11, further comprising a system load database
comprising load data about each client system, the load data identifying current database
workload processing utilization for the client system.

13. The distributed processing system of claim 12, wherein the server system utilizes the
current load data to balance database workloads among the client systems.

14. The distributed processing system of claim 11, further comprising an incentives database coupled to the server system, the incentives database comprising incentive data for each of the client systems, the incentive data acting to encourage each client system to be utilized for objectives of the distributed processing system.

15. The distributed processing system of claim 14, wherein the incentive data comprises sweepstakes entries for database tasks accomplished by each client system.

16. The distributed processing system of claim 11, wherein the network comprises the Internet.

17. A method of operating a distributed database system, comprising:
coupling a coordinator system to a network, the coordinator system configured to communicate with a plurality of worker systems through a network, and the worker systems acting as data servers for a database system; and
administering the database system through a first entity that does not own or operate all of the worker systems.

18. The method of claim 17, wherein the plurality of worker systems comprises over a thousand systems.

19. The method of claim 17, further comprising allowing operators of each worker system to control parameters of data server usage for the worker system.

20. The method of claim 19, wherein the controlling parameters comprise an amount of network bandwidth utilized or hours of usage.

21. The method of claim 17, further comprising organizing data and indexing information for the database in a multi-level hierarchy.

22. The method of claim 21, further comprising dynamically modifying distribution of data, index information, and user requests in response to an actual load to optimize performance of the database system.

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23. The method of claim 18, wherein the network comprises the Internet.

24. A method of operating a distributed processing system to provide a distributed database system, comprising:

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coupling at least one coordinator system to a network, the coordinator system configured to communicate with a plurality of worker systems through a network, the worker systems acting as data servers for a database system and comprising at least one thousand worker systems; and
administering the database system utilizing the coordinator system and the worker systems.

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25. The method of claim 24, wherein the database is administered by an entity and the worker systems are operated by the same entity.

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26. A method of operating a distributed processing system to provide a distributed database system, comprising:

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coupling a server system to a network, the server system being configured to communicate with a plurality of client systems through a network, the client systems configured to run a client agent program, and the client agent program running a database module that allows the client systems to function as data servers for a distributed database system;
storing in a capabilities database data concerning processing capabilities for the client systems; and
managing the distributed database system with the server system utilizing the capabilities database to schedule database workloads for the database modules.

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27. The method of claim 26, further comprising storing in a system load database load data about each client system, the load data identifying current workload processing utilization for the client system.

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28. The method of claim 27, further comprising utilizing the current load data to balance database workloads among the client systems.

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29. The method of claim 26, further comprising storing in an incentives database incentive data for each of the client systems, the incentive data acting to encourage each client system to be utilized for objectives of the distributed processing system.

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30. The method of claim 29, wherein the incentive data comprises sweepstakes entries for database tasks accomplished by each client system.

31. The method of claim 26, wherein the network comprises the Internet.